



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/647,472 | 08/26/2003 | Lawrence M. Burns | 1875.3770001 | 2309 |
| 26111 | 7590 | 02/09/2005 | EXAMINER | |
| STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | NGUYEN, JIMMY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2829 | |

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,472

Applicant(s)

BURNS ET AL.

Examiner

Jimmy Nguyen

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11- 14 is/are rejected.
- 7) ☒ Claim(s) 5-10 and 15-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/29/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Argument

The amendment filed 11/10/04 have found persuasives, therefore the examiner is hereby provide new ground of rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 - 4, 11 – 14 are rejected under 35 U.S.C. 102(b) as being anticipated Dinteman et al (US 6,154,715).

As to claims 1, 11, 14, Dinteman et al discloses (fig 1) a method and system of monitoring an integrated circuit chip, comprising:

(a) receiving at least one digitized sense signal (from the host 20 through the digital channel 14N) from the integrated circuit chip (12), whereby the at least one digitized sense signal represents a corresponding process-dependent parameter (expected state or data from DUT, column 3 lines 33 - 36) within the integrated circuit chip (12); and

(b) determining an analog value (from channel 16) for the at least one process dependent circuit parameters (expected state or data from DUT, column 3 lines 33 - 36) from the corresponding at least one digitized signal (from channel 14); wherein the

process-dependent parameter is measured within a process monitor portion of the integrated circuit (12) and the at least one determined analog value is utilized (the output of DUT 12 feed back to the channel to utilize the output result to correct the data) to correct for the process-dependent parameter in an operational portion of the integrated circuit.

As to claims 3, 13, Dinteman et al discloses (fig 1) the method according to claim 1, wherein step (b) comprises retrieving the at least one value (expected value) from a look-up table using the at least one digitized signal (channel 14).

As to claims 4, 14, Dinteman et al discloses (fig 1) The method according to claim 1, wherein step (b) comprises calculating (from the computer 10) the at least one value from the at least one digitized signal.

As to claims 2, 12, Dinteman et al discloses (fig 1) a method wherein steps (a) and (b) are perform outside of the ic (12).

Allowable Subject Matter

1. Claims 5 – 10, 15 – 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record are fail to disclose digitized sense signal includes a plurality of digitized sense signals that represent a plurality of the following:

a gate-to-source threshold voltage of a transistor fabricated on the integrated circuit chip;

a transconductance parameter of a transistor fabricated on integrated circuit chip;

a sheet resistance of a resistor fabricated on the integrated circuit chip;


a temperature of the integrated circuit chip; and

a power supply voltage on the integrated circuit chip.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen at 571-272-1965. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

JN.
Feb 3, 2005


VINH NGUYEN
PRIMARY EXAMINER
A.U. 2829
02/04/05